NASA Glenn Success Stories

IEC Infrared Systems Save Lives and Protects Property



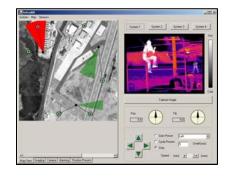
TECHNOLOGY

The NASA Glenn Research Center is a recognized leader in the characterization and understanding of microgravity combustion science. A key tool for understanding combustion is thermal imaging. For NASA spin-off company IEC, the development of infrared diagnostics for use in microgravity combustion research is the basis for their Infrared Thermal Imaging Systems product line.

COMMERCIAL APPLICATION

Infrared imaging devices allow users to see through smoke and fog, as well as in total darkness. Infrared imagers have widespread use in military, facility security, and emergency first-responder applications.

IEC was founded by two NASA Glenn microgravity researchers, using the experience and engineering know-how they developed in solving NASA's



challenges in measuring high temperature flames. NASA Glenn encouraged IEC's founding principals to explore new product ideas based on the infrared imaging techniques learned on flight experiments.

IEC has developed a line of products that deliver the highest levels of performance in their price class, providing best value solutions to their customers. The company's Infrared Thermal Images Systems product line features a suite of thermal imaging products that are used in military, emergency response, and facility security applications. IEC's *NightStalkIR*™ Thermal/Visual Imaging System and *IntrudIR Alert*™ Alarming/Tracking System are being used at home and abroad to locate personnel stranded in emergency situations, defend soldiers on the battlefield, and protect high value infrastructure.

SOCIAL/ECONOMIC BENEFIT

IEC was founded in 1999, and quickly grew into a multi-million dollar company employing 17 scientists and engineers. IEC's cost-effective, high-performance systems are unique and innovative combinations of advanced control techniques, selected high performance components, and inexpensive off-the-shelf components. Technology concepts successfully used on NASA spaceflight experiments have been adapted for terrestrial applications, saving the lives of disaster victims, enhancing the efficiency of firefighters and other emergency responders, defending our soldiers in battle, and providing the surveillance information that is needed to protect key facilities.

NASA APPLICATIONS

IEC's steady reinvestment into its suite of commercially available products continues to improve infrared thermal imaging technology. The resulting improvements in non-intrusive diagnostic technology can deliver greater scientific data return to NASA for reduced cost.

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